The Environmental Teapot and Other Loaded Household Objects

Reconnecting the Politics of Technology, Issues and Things

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Taking the teapot as an example, Noortje Marres, a sociologist at Goldsmiths University in London, examines how it is used to make associations between disparate issues, contexts and players. How can you 'charge' objects with issues, or in other words the 'issuefication' of things, and what role does digital technology play in this? Her analysis especially focuses on the fact that political disputes are fought out by way of objects, and not only by people.

In Dutch, a 'teapot' refers to, among others things, a particular type of children's story. According to this formula, the storyteller uses the word 'theepot' to provide a cue to the listening children prompting them to guess the word that should come next in the story. When the storyteller says: one bright Saturday morning, Lucy woke up early and went to the 'teapot', those listening are supposed to fill in the blank, and say: 'market' or 'toilet' or 'mountains'. If there is more than one listener, suggestions tend to multiply, as the answer to this type of cue is both easy to guess and by no means self-evident. I was reminded of this game of creative story-telling in recent years, as teapots were proliferating with special intensity in publicity media, in the context of a broader hype around sustainability and environmental living. In this period, teapots – and related household objects like kettles, cups and, in Britain, 'the cuppa' – became a routine presence in environmental campaigns, advertising, news, brochures and infotainment online (see *figure 1* for an example). These teapots were usually accompanied by slogans advertising the special opportunities offered by kettles and such for saving money, energy and the environment: 'only boil what you need', 'keep your kettle in check', 'green your cuppa', or more plainly 'Drink a Cuppa Tea', 'find out the true cost of that cuppa', and so on.

While teapots were pretty much a constant presence in environmental publicity in this period, there were some subtle and not so subtle shifts in their connotations. One could say that kettles and teapots came to serve as a kind of placeholder-object, as they were deployed to invoke a range of related but different issues: climate change, the smart grid, sustainable design, coal-fired power plants. Two examples can serve as an indication of the range of issues teapots were used to conjure up. At one end, there is the teapot that featured in *Teatime Britain*, a film co-produced by the BBC and the energy company EDF in 2009, which seeks to demonstrates the basic idea behind the so-called 'smart grid'.[1] This film places us in the control room of the UK national electricity grid control centre, showing us the grid controller at work, whose moment comes with the end of *Coronation Street*. The end of this TV show is followed by a surge in kettle boiling across Britain, with millions of kettles being switched at more or less the same time, which in this case require the manager to make an impromptu intervention, bringing online a French hydraulic dam at the last minute, highlighting the dynamic, real-time and 'social' nature of grid

management.

Around the same time, teapots also made an appearance in *A Time Comes*, a documentary about the occupation of the Kingsnorth power station by Greenpeace activists in the English County of Kent. During an interview, one of the activists who famously scaled the tower of the power station equally invoked teapots when she said: 'What we did that day is shut down a giant power station. Which was a pretty big deal. But lots of people doing little things makes just as much difference.[2] Here, the teapot is used to invoke not smart but dirty, CO2-emitting technology, with the coal-fired power plant as a case in point.

As in the generative game of telling a 'teapot', then, teapots were used to insert a range of different issues into the 'stories' told in publicity media in this period. In this article, I would like to explore this capacity of teapots to invoke issues, by considering them as a particular type of 'interface' objects, to use the term proposed by Penny Harvey. As in the examples above, teapots can be used to establish connections between disparate issues, settings and actors: they help to connect the rhythms of everyday social life with the technological dynamics of energy provision. As such, I want to propose here, teapots provide an interesting site for a wider exploration of how objects may become 'charged' with issues, or what I call the 'issuefication' of things (Marres and Rogers 2005). I will argue that the normative capacities of such issuefied objects can be usefully distinguished from other types of normative or 'political' objects, most notably the 'scripted object'. (Akrich 1992) As I will discuss below, the latter object has normative effects insofar as it projects a particular role onto subjects, but in the former case what matters is the 'resonance' of the object itself: the range of issues that it is able to invoke.

In distinguishing these two forms of Dingpolitik, or politics of things, I will concentrate here on how to conceptualize them, but I will touch as well on the empirical methods we can use to analyse different types of normative objects. I will also pay special attention to the role of technology, and in particular the role of digital technologies, in enabling the 'issuefication' of objects. The ability to load issues into objects, I will propose, depends quite heavily on the ways in which said objects are technologically equipped. All this means that I will be approaching teapots as 'interface objects' also in a second sense: this type of object can be used to investigate wider connections between the politics of things, technologies and issues, as they arise in the case of 'issuefied' objects.

The Politics of Augmented Objects versus that of Scripted Objects

Especially in Britain, but by no means exclusively, it is difficult to think of a more 'social' object than a teapot. Generally speaking, teapots – and related household objects like kettles, stoves and the aforementioned cuppa – are closely associated with sociability, as in the phrase 'I'll put the kettle on', which recurs in countless clips and moments of English life, and so obviously invokes a reassuring domesticity, the comfort of a welcoming host. The teapot may also be considered a 'political object', and this insofar as it is invoked to affirm political bonds, such as those of the nation-state. As the *Mail Online* stated in a recent article: 'Britain is a nation of tea and coffee drinkers' and: '97% of Brits own a kettle.'[3] The very ordinariness of the teapot makes it possible to invoke a population: because it is both ubiquitous and supposedly culturally specific, an everyday practice like drinking tea can be taken to imply membership in a larger collective. Indeed, in recent decades sociologists, anthropologists, philosophers and historians have directed attention to precisely this capacity of material objects and practices for the organization of political collectives (Anderson 1983; Winner 1980; Latour 1993). (Tea and coffee seem to have special affordances in this respect: they figure prominently in historical accounts of the emergence of 'modern publics' as a distinctive moral and political form in the seventeenth century, in the coffeehouses of Vienna and Istanbul) (Sennett 1977; Leezenberg 2007).

The 'environmental' teapots under discussion here equally exhibit these social and political

features, but this type of object also complicates our understanding of them. In their case, the capacity of objects to help forge political or moral bonds does not just extend to people, but is also made to include other categories like nature or 'the future' (Braun and Whatmore 2010). Moreover, these environmental teapots are made to serve a very particular normative purpose: they are used to establish connections between everyday living and complex, often cross-border issues. To make sense of these particular normative capacities of objects, I want to propose, it may be useful to distinguish this type of 'normative' object from another one, namely the scripted object.

The latter concept was put forward by sociologists of technology in the 1980s and 1990s to expose the ways in which seemingly 'neutral' technologies can be deployed to pursue political ends (Akrich 1992; Latour 1992; Oudshoorn and Pinch 2003; see Wilkie 2010 and Berker 2011 for recent elaborations). Most influentially, Madeleine Akrich (1992) proposed the idea of the 'script' to describe how technological objects could be used to turn people into national subjects, in a classic case study of electricity meters in Ivory Coast. Noting that the administration of Ivory Coast had few resources at its disposal for involving people as citizens in the nation-state, she argued that the electricity grid became an important means for forging political bonds between the government and its subjects. The device of the electricity meter, she argued, was crucial to this project: by rendering electricity use measurable, the device enabled the on-going registration of individuals, and thereby their enrolment as 'documented subjects' in an infrastructure that was national in scope. In Akrich's account, then, the installation of household electricity meters amounted to a nation-building exercise.

Akrich proposed the concept of the 'script' to account for the normative capacities of this type of object, and in their use of this concept sociologists made a number of assumptions about the nature of the politics of technological objects (Akrich 1992; see also Oudshoorn and Pinch 2003). Firstly, scripted objects are called 'political' ***insofar as they act upon subjects:*** in Akrich's study the electricity meter is a political object insofar as it projects a particular role to be played by subjects, in this case, that of a documented individual subject that may be addressed by an administrative system. Secondly, and in relation to this, in order to ascribe normativity to scripted objects, it was necessary to attribute ***determinate effects*** to these objects.

That is, the Ivory Coast electricity meter counted as a political object for a precise reason: because it rendered electricity use measurable in a context in which strong bureaucratic institutions were absent, this device could fulfil the politically relevant function of defining people as documented individuals implicated in a national arrangement. ***This*** – and no other feature – is what made the electricity meter a political object, in this case. Finally, it should be noted that a scripted object like Akrich's electricity meter is only ***latently*** political: the object's political intervention here happens below the radar of what is generally assumed to be going on, and this circumstance ***adds*** to its political efficacy. The fact that electricity meters are ***not*** widely recognized as capable of political intervention makes it much easier to deploy them to such ends (see on this point also Marres 2010). And it then becomes the task of social studies of technology to ***expose*** these normative capacities of objects, to demonstrate that it is going on and analyse its workings.

The environmental teapots under scrutiny here are suggestive of a different type of Dingpolitik, which I will call, for now, the politics of 'augmented objects'. This type of object can be called 'political' insofar as it comes to resonate with issues. Here, what requires special attention are not, in first instance, the effects of objects on subjects, but rather the 'normative range' of the object itself: the spectrum of concerns that it 'carries' or may 'activate'. A useful example here are the technologically 'enhanced' teapots that in recent years featured in publicity about sustainable innovation. These are teapots and kettles to which have been added some technical – often digital – component, like an electronic display or a light that changes colour, in order to communicate an environmental message about boiling water (see also Marres 2012). Augmented teapots

come in different shapes and forms: from the eco-kettle that sells for £ 39. 99 in the Ethical Superstore, which has a simple measuring strip and helps you 'boil the exact amount of water you need' – to more sophisticated and experimental versions, such as Chris Adam's intelligent teapot (see *figure 2*), which provides real-time cues about the 'environmental quality' of electricity, by drawing on a network feed from a web site that monitors the 'carbon intensity' of the current electricity supply in the UK.

In contrast to scripted objects, such augmented teapots present us with *explicitly* political objects: they wear their normative capacities on their sleeve, so to speak. These teapots are equipped with what Celia Lury and Lisa Adkins (2009) have called 'empirical technologies': they come with auxiliary devices attached to them, such as lights, informational 'feeds', and displays, which quite literally put on display the ability of these objects to act on environmental issues. The special capacities of these objects tend to be proclaimed in other ways too, through slogans and other forms of publicity. Thus, the blog on which Chris Adams (2009) presents his augmented teapot carefully explains how his augmented teapot makes it possible to insert environmental issues into everyday life: 'Placing the [teapot] in a relatively high traffic co-working space is a great opportunity to speak to people and see how best to communicate on issues related to climate change. '

In this respect, Chris Adams' carbon teapot can clearly *not* be called a 'latently' normative object. To the contrary, his teapot can only be called political insofar as it is equipped with explicit visual, textual and technical cues indicating its capacity for action on the environment: a light, a measuring strip, a feed, a name – ecokettle. Two further points follow from this.

First of all, the politics of augmented objects does not seem to derive exclusively, or even principally, from their ability to act *on subjects.* Their normativity is more open-ended than that: it hinges on the capacity of the object, not to project a definite role onto human actors, but to become 'charged' with issues. In this case, the focus rests very much on the explicit investment of objects themselves with political and moral capacities, such as the ability to make global issues relevant on the plane of everyday living. What is at stake here, normatively speaking, is the question of what *objects* are capable of: Can a teapot really facilitate effective, significant, meaningful engagement with environmental issues? Here, then, it is the object that is being equipped for political or moral action, at least as much as the subject. Partly as a consequence of this, the politics of augmented objects seems much less 'determinate' than that of scripted objects. In this case, whether the object can be ascribed a 'politics' hinges on the capacity of the object to resonate with a *spectrum* of issues: climate change, smart grid, peak oil, innovation, the carbon economy, coal-fired power plants, and so on. What matters here is the normative range of the object, the spectrum of issues that may be 'loaded' into the object, or as the case may be, that it is not able to accommodate.

This account of augmented teapots has some wider implications for how we understand the connections between the politics of objects and technology in this case. These teapots provide a useful reminder of the auxiliary role played by technology in enabling the politics of objects. Of course, the ability of technology to extend and amplify the capacities of both subjects and objects has long been recognized in social and cultural theories of technology (McLuhan 2001 [1964]). Augmented teapots, however, invite a particular empirical question and a more general philosophical comment on this score. To begin with the question: What exactly is the role of digital technologies in enabling the politics of objects, and 'issuefication' more in particular. Digital devices, it has also long been recognized, have special affordances when it comes to the 'animation' of things: sensors can be used to render things 'aware', chips can make them 'smart', and provide them with other actor-like qualities like feed-back and control (Suchman 2011).[4] In the case of augmented teapots, however, we are dealing not so much with the investment of things with actor-like capacities (talking, thinking, speaking) but with the loading of issues into objects. This particular ability of digital devices I will further explore in the last section of

this article. [5]

As regards philosophy, to direct attention to the normative equipment of objects, as I do here, is to suggest a particular take on political ontology. This branch of political philosophy is classically concerned with the 'innate' normative aspects of different beings, but augmented teapots remind us that the normativity of objects also depends on how objects are decked out: they direct attention to the *artefactual* nature of the politics of things. In this case at least, it is only insofar as the object is technologically enhanced with features like feeds and sensors, and is 'plugged' into various networks, that it may seem capable of opening issues up for action. Augmented teapots, I want to argue, are suggestive of a different version of what the philosopher Graham Harman (2007) has called a 'non-exceptionalist' understanding of objects: just *like* other beings capable of normative action, that is to say humans and institutions, objects depend on auxiliary devices for their ability to exert political and/or moral force. In order to grasp the politics of objects, we must then pay attention not just to these objects themselves, but also to the particular devices with which they are equipped. In the case of augmented objects at least, the politics of objects includes the politics of technology.

Issuefication: A Pragmatist Politicsof Objects?

But there is also another relation to consider, that between the politics of objects and the politics of *issues.* [6] If we are right to say that teapots may be charged with issues, what relation between objects and issues does this imply? What does 'issuefication' actually mean? In the post-war period, the politics of issues has principally been understood, in the social and political sciences, as a *discursive* politics, one that involves the deployment of salient ideas, terms or 'issue frames' – and not so much things – to instigate and organize social movements, political processes and/or news cycles (Snow and Benford 1988). How does the more peculiar phenomenon of the issuefication of objects relate to, or differ from, these more familiar forms of issue politics? And how should we understand the relations between a particular object of issuefication, say a teapot, and broader societal and political processes of issue formation, such as those associated with the formulation of 'issue agendas' by political and other organizations and the 'issue cycles' that unfold in the news and other media?

Minimally speaking, 'issuefication' refers to a dynamic in which an object comes to 'resonate' with particular matters of concerns (Marres and Rogers 2005). Such a definition, however, raises as many questions as it answers, for what does it mean to speak of 'resonance' in this context, and what is it that issuefied objects resonate with? These questions can be approached conceptually and empirically, and in the remainder of this article, I will touch on both. Conceptually, issuefication invokes a particular argument of American pragmatist political philosophy. Among other things, it calls to mind the intellectual project of John Dewey, who proposed that many of the things we associate with politics and morality – like values, problems, desires, conflict and interests – are best regarded as 'aspects of objective situations' (see on this point also Marres 010; Muniesa 2012). As Dewey (1998 [1908]) forcefully put it: 'Such things as lack and need, conflict and clash, desire and effort, loss and satisfaction [must be] referred to reality. '

In making this claim, Dewey proposed to displace all sorts of normative phenomena that we have learned to associate with humans – conflict, interest, pain and values – onto the plane of objects. It turns conflict, pain and trouble into aspects of what Dewey insists on calling objective, problematic situations. Which is also to say, from a Deweyian perspective, if we are to account adequately for the 'politics of objects', we must pay careful attention to the *problematization* of things. To quote him one more time: 'Valuation takes place only when there is something the matter; when there is some trouble to be done away with, some need, lack or privation to be made good, some conflict of tendencies to be resolved by means of changing existing conditions. ' (Dewey 1955 [1908])

To take our cue from John Deweys pragmatism in the analysis of the politics of objects is then to insist that there is nothing resolved, or neat or fixed about a politics of objects. Instead, we must consider the ways things may become charged with a range of problems, issues and trouble.

Dewey's object-centred theory of normativity, then, can help us analyse the issuefication of objects. He invokes a very diffuse process in which 'trouble' – 'conflicts of tendencies' – emerge on the plane of objects. Normativity here is first and foremost something that 'happens' on the level of things. This approach can be contrasted to a 'legislative' or 'prescriptive' understanding of normativity, which can still be recognized in the abovementioned notion of the 'script', and suggests that normativity resides in the 'blueprints for action' that are inscribed in objects and projected or forced onto subjects. Dewey proposes to understand normativity rather as a material event, as something that involves inevitably muddled forms of trouble emerging on the level of objects. He directs attention to problematization as something that plays itself out in things: it is of the order of the event, and not of intentional action or purposeful effects and the design of objectives into things.

However, of this troubling politics of objects we can still ask: How do these entities succeed in 'piggybacking' on unfolding events of politicization? Just as we can ask of political actors how they succeed in taking advantage of existing political currents, and in making them serve their purposes, so we can ask of objects and devices: How, as part of a wider, unfolding dynamics of issuefication, do they succeed in 'bending' the currents of issuefication? How do objects come to accommodate wider issues and how do they contribute to the specification of these issues?

A pragmatistically informed approach to the politics of objects then opens up a number of questions that we may take up in the empirical analysis of the issuefication of things. Firstly, if we understand issuefication as a wider ontological process that may be instrumentalized, that is made to serve specific ends, the question is how, exactly, this is done. [7] How does the equipment of objects, as in the case of the augmented teapot, provide a way to specify an issue-object, and to align it with particular moral and political purposes? To begin answering this question, it is useful to consider the particular devices that are deployed to do this work of the specification of issue-objects. On this point too, the augmented teapot may offer some useful examples: in the 'Only boil what you need' poster in ***figure 1***, for instance, the object (teapot) and issue ('environment') are associated by the graphic trick of *overlaying* issue and object (Marres 2012). By establishing a visual connection between a teapot and the planet, the suggestion is helped along that the former offers a point of access to the latter. In the case of Chris Adam's 'digitally enhanced' teapot (***figure 2***), object (teapot) and issue (climate change) are associated through a real-time feed, which literally makes it possible to load live environmental data – about carbon emissions associated with the UK electricity supply – into objects. Here, the supposed 'liveness' of the environmental information feed may (or may not) help to dramatize the liveliness of the issuefied object.

Indeed, there seems to be a plethora of other devices available for channelling currents of issuefication, from the labelling of consumer products to the spatial tracing of waste with the aid of GPS technologies. Empirical descriptions of these techniques would surely help to clarify the somewhat mysterious phenomenon of the issuefication of things. However, I want to conclude this article by considering another, though related, empirical question: By what methods can we analyse the 'issue content' of a given object? This question brings us back to a point raised at the beginning of this section: that of the similarities and differences between the phenomenon of 'issuefication' and those processes of 'issue formation' that have been analysed in such great depth in post-war political and social science. Our brief excursion into pragmatist philosophy has made it clear that dynamics of issuefication do *not* principally operate on the level of ideas, as many political and social scientists have assumed about issue politics. But in spite of this obvious difference, social

and political methods of 'issue analysis' may still prove useful for researching the issuefication of things.

Object Variability as an Index of Politicization and How to Analyse This

Issuefied objects, as mentioned, may host a variety of issues. In the examples above, teapots were variously associated with climate change, the smart grid, coal-fired power plants, and geeky innovation cultures. In this regard, issuefied objects present highly variable or unresolved objects, and this resonates well with Dewey's insistence that the normativity of things is marked by trouble and conflicting tendencies. This 'variability' of issuefied objects also seems important for their empirical analysis, in a number of ways. First and foremost, the variation among the issues with which a given object becomes associated is something that we may well be able to measure. Of course, in some respects, fluctuations in the 'normative charge' of objects may be very tricky to detect, but it is not so difficult in others. For a well-publicized object like the environmental teapot, it is fairly easy to get at least an indication of the spectrum of issues with which this object is associated in different media and settings.

To get an indication of the 'normative range' of this household object, we must then consider its *distribution:* we must examine the different settings in which the object appears, and plot the different connotations with which it has become associated here. These varying associations may tell us something about the issue content of the object, or more precisely, its current state of issuefication. Here, textual methods of issue analysis may prove relevant for the study of the issuefication of things. Digital technologies of textual and visual analysis may prove especially useful. Turning to the Web, we can use basic tools of online textual and visual analysis to document the range of issues with which a given object has become associated in different media settings Rogers 2009; see also Marres and Rogers 2005). [8] Using these instruments, we can make an indicative mapping of 'resonant' terms with which teapots are associated in relevant online spaces, or 'spheres'. Thus, *figure 3* presents an overview of key-words and phrases that appear with some frequency in proximity to 'teapot' and 'kettle' in different groups of web sites: energy companies, a sustainable innovation network, and green blogs (the size of the respective teapot indicates the relative frequency of its mentioning.).

As it turns out, analysis of these sources indicate an issue range for the teapot that is quite substantial in some ways, but limited in others. While the teapot's connotations here extend from 'peak oil' to 'health', and from 'thought bombs' to 'veg box recipes', they do *not* include some of the more challenging issues associated with 'environmentally aware' household objects, such as fuel poverty: the mounting evidence that the rising costs of domestic energy use are hurting relatively poor people disproportionately (Preston and White 2010).

This type of analysis could be further developed to capture variations not just across spheres and media settings but also in time. [9] But in both cases, the variability of the object might be taken as an index of its state of politicization. Political theorists from Machiavelli to Habermas have insisted on the fact that the capacity to *change* one's mind or one's political alliances is a crucial asset in politics. Relatedly, it has been argued that political arguments made by seemingly non-political actors, such as scientists, are especially powerful (Barry 2001). Perhaps something similar may be said of everyday, 'non-political' objects taking on a normative charge. Their ability to adopt varying issue agenda's may then serve as an index of its normativity.

These dynamics require further exploration, but I would like to conclude this section by flagging that, in analysing dynamics of issuefication, we must take care *not* to assume that it is only connotations and not the objects that vary. That is, we should not think as a matter of course that variations occur exclusively on the level of issue- associations or objects attributes, while 'the thing itself' would somehow remain stable (see on this point

Mol 2002). Teapots come in many different shapes and sizes, and this applies to environmental teapots just as well. Online textual and visual analysis can help out on this point too: *figure 4* gives an indication of the range of teapots that figure in environmental energy spaces on the Web, based on Google Image Search. No doubt the issues invoked on these pages vary, but so do the teapots themselves. Just because a teapot is 'just a teapot', this is no reason to not take seriously the variability of the object 'itself'.

Conclusion

The investigation of environmental teapots, then, can help to bring into view some notable differences between the politics of 'issuefied' objects and those of scripted objects. The latter objects, we have seen, can only be called political insofar as *determinate* effects can be traced back to them, such as the constraints they place on people's behaviour and their influence on people's self-understanding. In this case the more singular its effects, the stronger the scripted objects' claim to politicality. In the case of issuefied objects, by contrast, it is the variability of forms, issues and associations that the object may accommodate, which signals that we are dealing with a 'normative' object. The higher the contrasts and tensions among the issues and associations that are loaded into the object, the stronger it must be coded on the political spectrum (going from a 'highly' normative to a 'not so' normative object). Normativity here is a matter of bandwidth. The variation of its normative charge is what makes an issuefied object a political object, and the 'range' or 'scope' of this variation can be treated as an index of its state of politicization.

It is a task for us as researchers to determine which dynamics – those of scripting or those of issuefication – are most relevant to understanding the politics of objects in particular cases. Teapots may be analysed for the scripts built into them, but also for the issues they are used to invoke, canalize and specify. The divergences and confluences between these two normative dynamics of objects no doubt require further examination. Perhaps the most important thing about analysing 'issuefication' is that it directs attention to political *contestation* as something that plays itself out through objects, rather than limiting this capacity to human actors (who refuse to follow scripts, for instance). To attend to this trouble also requires us to recognize the various ways in which the politics of issuefication may be untraceable. Jeanne Giraud, the graphic designer who designed *figure 3*, put it well during a discussion of what such a figure might possibly tell us. Pointing to the words that leave the teapot like smoke, Jeanne made a quick stroke with her arm in the air, saying 'into the atmosphere', thereby turning the teapot for a moment into a factory, a source of emissions.

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Footnotes

1. I am grateful to Klaas Kuitenbrouwer for the tip: BBC / EDF, *Teatime Britain*, www.bbc.co.uk.
2. 'A Time Comes: The story of the Kingsnorth Six, Nick Broomfield', *The Observer,* 31 May 2009, www.guardian.co.uk.
3. Our Cuppa Habit is Heating Up, *Mail Online,* 25 October 2011.
4. This suggests a much wider significance for the concept of the 'Internet of things', which is often taken to refer, in a more limited sense, to the technological possibility of assigning IP addresses to objects.
5. In taking up this question, we shouldn't forget that many of these features have also been ascribed to other technologies in the past. Electricity, for instance, has long been thought to make possible communication among objects (Nye 1999; see also Bennett 2010).
6. I am grateful to David Oswell for insisting on the importance of this question.
7. There are then at least two parts to processes of issuefication: the emergence of ontological trouble as event and the specification of this trouble through the deployment of devices. It seems characteristic of issuefication that these two parts cannot be clearly distinguished, though this requires further discussion.
8. For an overview of tools developed by govcom.org and the Digital Methods Group at the University of Amsterdam, see wiki.digitalmethods.net.
9. Erik Borra and Ingmar Weber have developed a more sophisticated version of this type of issue analysis, in their project Political Search. This application relies on online dynamics to determine the fluctuating 'political charges' of data-objects. Data-objects are visualized using a literal spectrum bar, which shows the political composition of the object at a given moment (does 'Obama' tend towards the red end of the spectrum or rather towards the blue? How about last week?). See politicalinsights.sandbox.yahoo.com.

Tags

Democracy, Design, Media Society, Philosophy